

NORTHWESTERN ENERGY RESIDENTIAL ELECTRIC RATES AND ELECTRICITY SUPPLY (THROUGH JUNE 2013)

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Introduction

The following graphs break down NorthWestern Energy (NWE) Residential Electric Rates, Electricity Supply, and selected Electricity Supply Prices. This information is available in published tariffs and routine dockets at the Montana Public Service Commission (PSC).

Since 1998, customers purchasing electricity services from NWE or its predecessor have paid three primary electric rates in dollars per kilowatt-hour (\$/kWh):

- (1) Distribution Delivery Service (Distribution) rate
- (2) Transmission Delivery Service (Transmission) rate
- (3) Electricity Supply Rates.

Whereas the Transmission and Distribution rates pay for the wires and poles that transmit electricity, the Electricity Supply Rates pay for the electricity (supply) itself.

NWE has long-term contracts to buy supply from PPL Montana, LLC (PPL), which owns coal-fired plants and hydroelectric plants; Citigroup Energy, Inc. (Citigroup), which provides a standard 25-megawatt (MW) quantity; and Invenergy, LLC, which owns a 135-MW wind farm (Judith Gap) in Wheatland County.

NWE is required to offer to purchase supply made available from Qualifying Facilities (QFs).¹ A QF is a cogeneration or renewable power plant no larger than 80 MW that is owned by an entity not otherwise generating or selling electricity. As of March 2014, NWE is purchasing supply from

¹ See 16 U.S.C. §§ 824a-3 *et seq.* (2014).

² NWE collects QF Tier II costs through the Electric Supply Rates and a separate rate; these rates are combined on the graphs.

³ See Or. 6925f, Dkt. D2008.6.69 (Nov. 13, 2008).

⁴ See Or. 7159f, Dkt. D2011.5-41 (Feb. 14, 2012).

sixteen wind and hydroelectric QFs that can provide about 46 MW (QF-1). NWE also continues to purchase almost 100 MW from ten QFs that signed contracts with the Montana Power Company between 1984 and 1996 (QF Tier II).²

Although NWE enters long-term contracts to buy most of its supply, it also makes short-term purchases up to eighteen months in advance (short term fixed) or only an hour in advance on the open market (spot market).

Since January 2009, NWE has generated some of its own supply at a portion of a coal-fired power plant that it owns in Colstrip, Montana (Colstrip Unit 4).³ It also purchased the 40-MW Spion Kop wind farm (Spion Kop), which began producing power in December 2012.⁴

NWE has owned and operated the Dave Gates Generating Station (Dave Gates) since January 2011.⁵ The primary function of Dave Gates is not to provide supply, but rather “the reserve capacity necessary to maintain transmission system reliability and balance on a moment to moment basis as customer demand and available resources fluctuate.”⁶ As resources that fluctuate, Judith Gap, Spion Kop and some of the QF-1 wind farms use a portion of Dave Gates’ capacity to level some of their fluctuation.⁷

NWE also purchases (other) supply from the U.S. Bureau of Reclamation, which owns Tiber Dam; Turnbull Hydro, LLC, which owns a 13-MW “community renewable

⁵ See Or. 6943a, Dkt. D2008.8.95 (May 19, 2009).

⁶ NWE Bill Inset p. 1 (Jan. 2011).

⁷ Although a prior version of these graphs allocated a percentage of the cost of Dave Gates to these wind farms, this version does not.

Although the Montana Legislature sets the total budget of the Montana Consumer Counsel and PSC, the money is collected through rates (MCC & PSC Funding). NWE also recovers carrying costs, certain transmission costs, and third-party administrative costs (Administrative, etc.) through the supply rates. Finally, it applies a monthly rate adjustment (Cap) "so that the percentage rate increase for each customer class is no greater than the residential customer rate class increase."¹²

The Bonneville Power Administration's residential exchange credit (BPA Credit) shares the benefits of low-cost federal hydropower with NWE customers. As the marketing agency for electricity generated at federally-owned dams on the Columbia River, BPA provided inexpensive supply to the region until the 1970s, when increasing demand forced it to not renew contracts with certain utilities. "In order to avoid an energy crisis and to redress BPA's diminishing ability to satisfy the region's power demands," Congress created the BPA Credit to spread the benefits regionally.¹³

The deferred supply rate (Deferred Rate) corrects for over- or under-collections of certain supply costs, and may therefore be positive or negative.

The only component of the residential rate that does not appear on the graphs is the discount for certain retired NWE employees, whose personal consumption NWE reduces by forty percent before calculating the supply rates. This employee discount partially shifts costs to the other nine classes of customers, but for residential customers it accounts for only about \$0.02 of the roughly \$60 per-megawatt-hour supply rate.

¹² Or. 7219 pp. 11-20 (Oct. 22, 2013).

¹³ Test. Cheryl A. Hansen, 1kt. D2013-5-33, pp. 11-12 (May 31, 2013).

¹⁴ *Portland Gen. Elec. Co. v. BPA*, 501 F.3d 1009, 1014 (9th Cir. 2007)

energy project"; Basin Creek Equity Partners, LLC, which operates a natural gas-fired power plant near Butte; and a variety of financial institutions and other companies that market supply from unknown sources.⁸

At the time of deregulation, the Montana Legislature mandated a Universal System Benefits (USB) rate, which annually collects 2.4% of NWE's 1995 retail sales revenue "to ensure continued funding of and new expenditures for energy conservation, renewable resource projects and applications, and low-income energy assistance."⁹

NWE has also managed its own portfolio of conservation and efficiency programs – known as demand-side management (DSM) and funded through the supply rates – since 2004.

The PSC has approved five \$/kWh rates that enable NWE to earn a reasonable profit on certain investments.¹⁰ USB and DSM efforts that reduce the number of kWh sold would in turn reduce these approved profits if NWE could not collect certain revenues that it would have collected (Lost Revenues) had it not encouraged conservation and efficiency. In 2013, the PSC ordered NWE to refund some Lost Revenues after finding that DSM savings had been overstated (DSM Rebate).¹¹

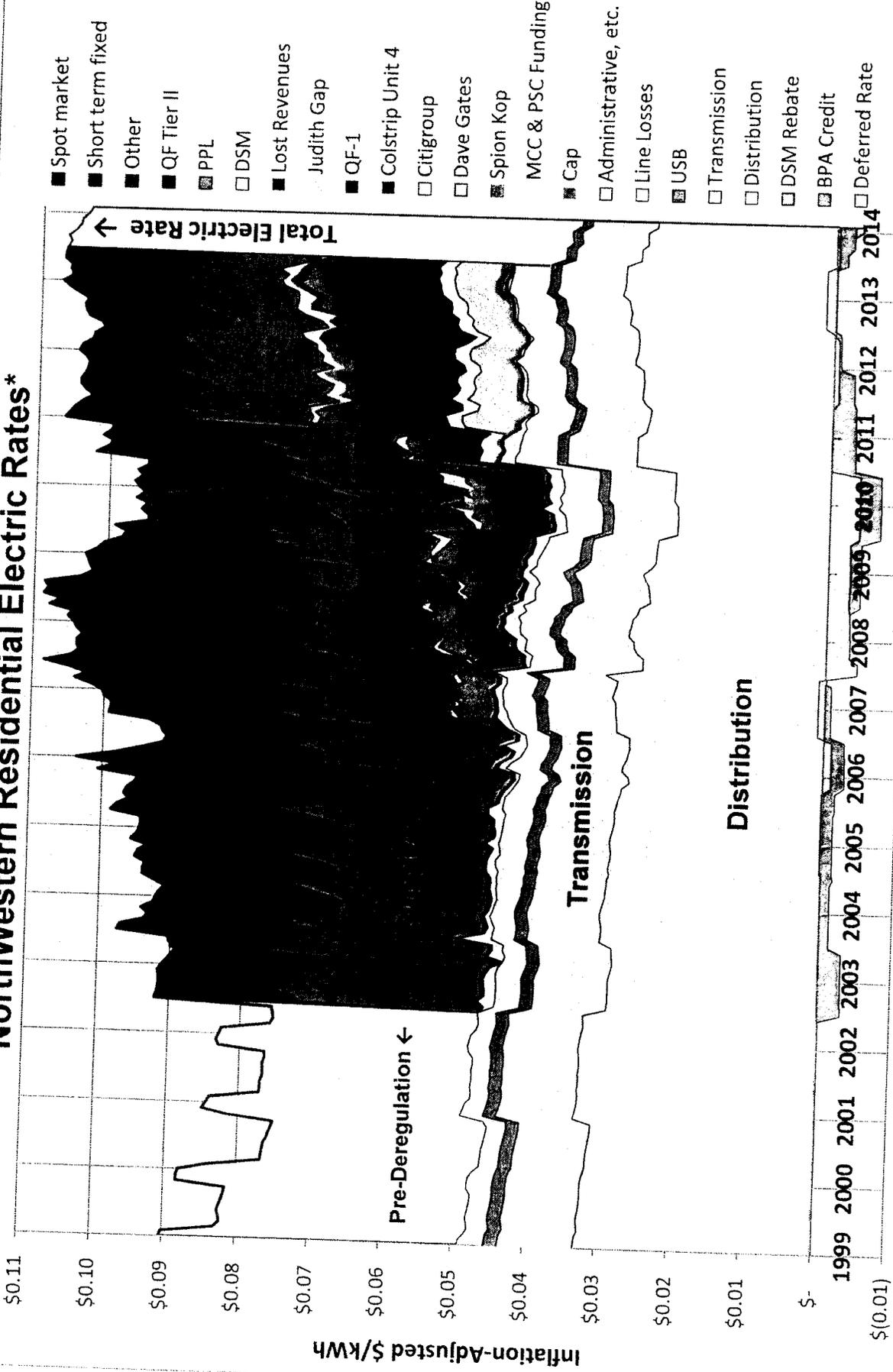
Whenever supply is moved across power lines, some is lost in the form of heat and electromagnetic energy (Line Losses). Although NWE assumes a loss factor of 8.5% to set rates for residential customers, the graphs show Line Losses for all customers based on the difference between the supply delivered to NWE and the supply consumed by customers.

⁸ For a partial list of these entities, see NWE's Response to Data Request MCC-005, 1kt. D2012-5-45 (Sept. 5, 2012).

⁹ Mont. Code Ann. § 69-8-402 (2013).

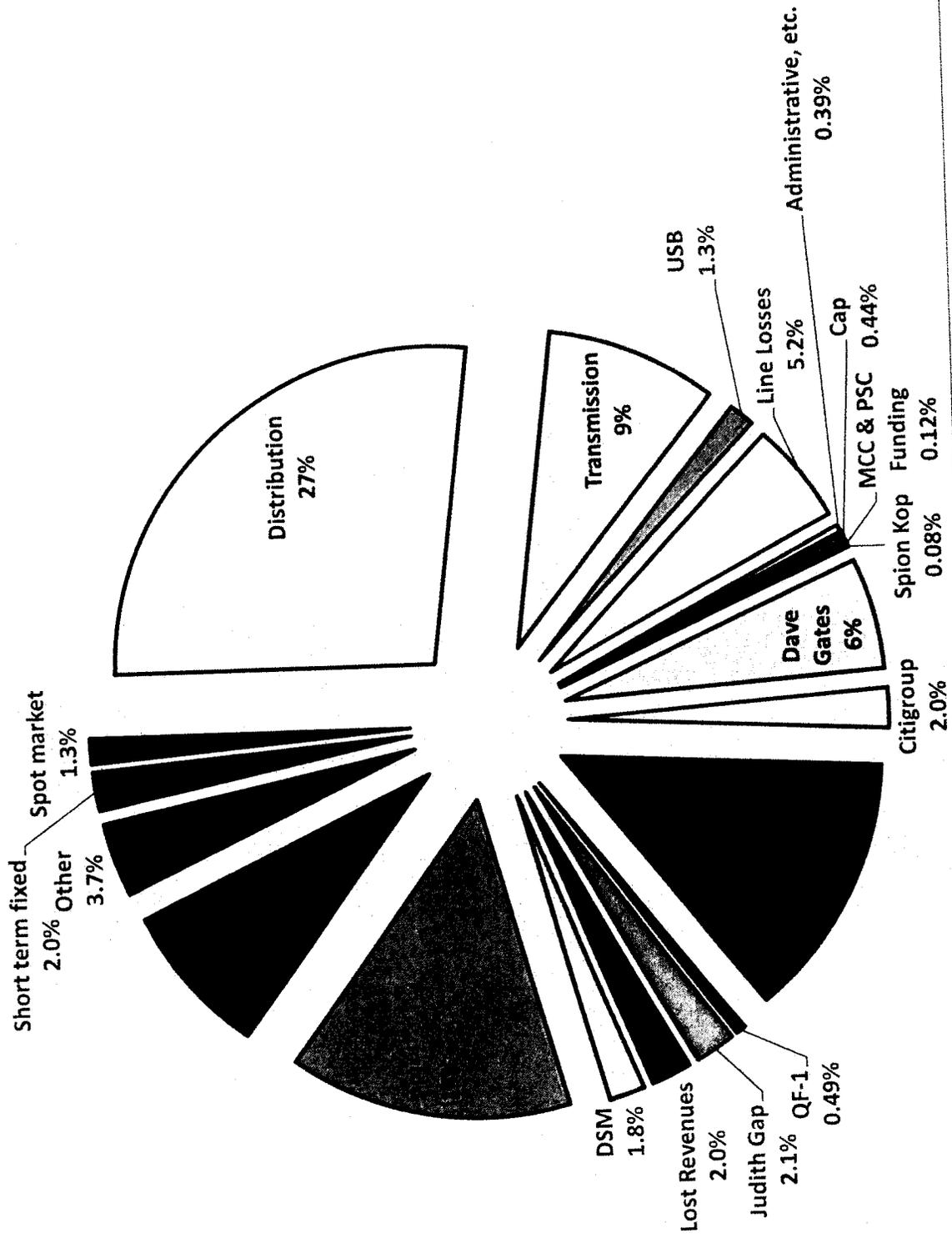
¹⁰ NWE earns profit through the Transmission, Distribution, Colstrip Unit 4 fixed, Dave Gates fixed, and Spion Kop fixed rates.

NorthWestern Residential Electric Rates*

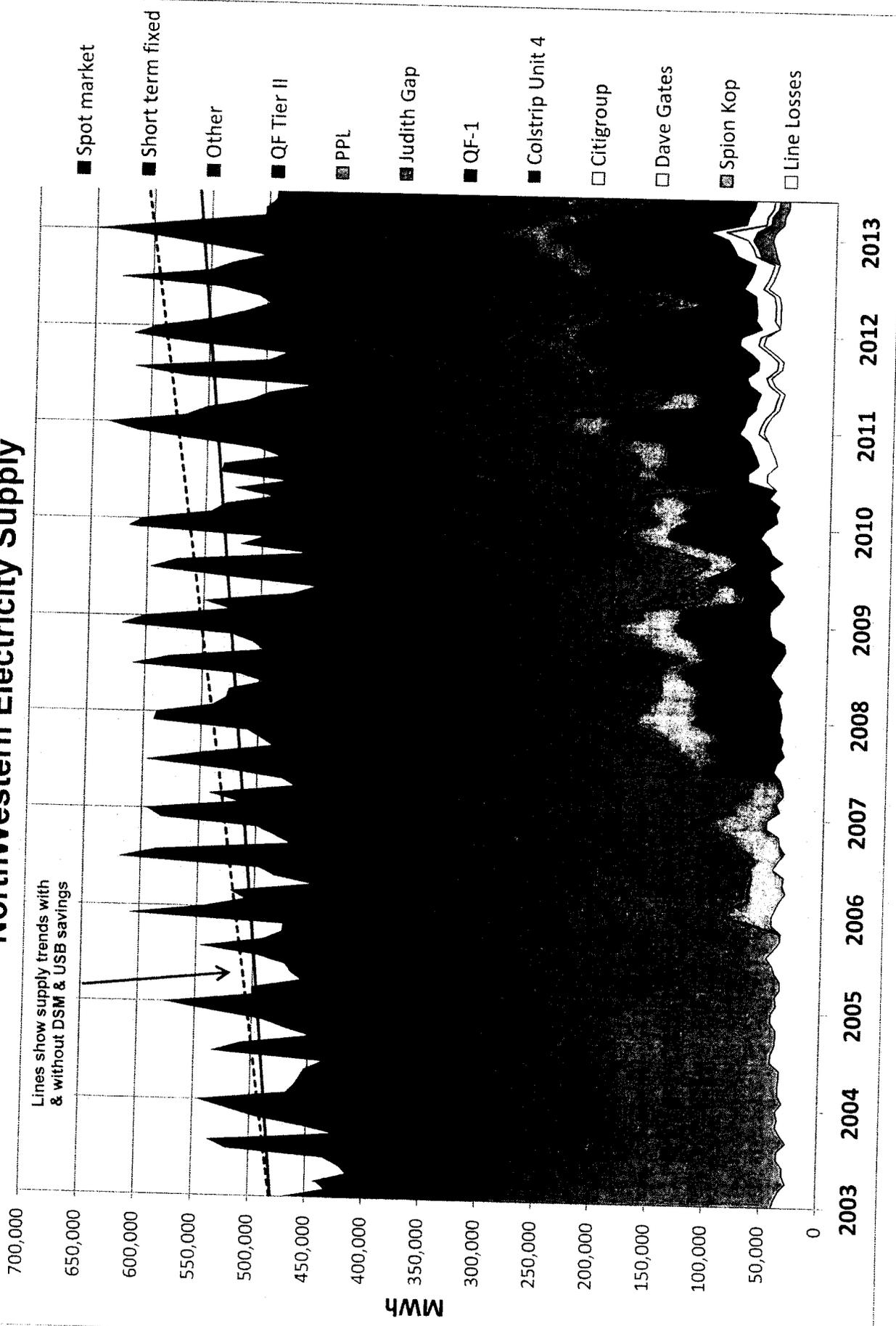


* Currently, Residential Electric Rates are charged in addition to a flat charge of \$5.25 per month

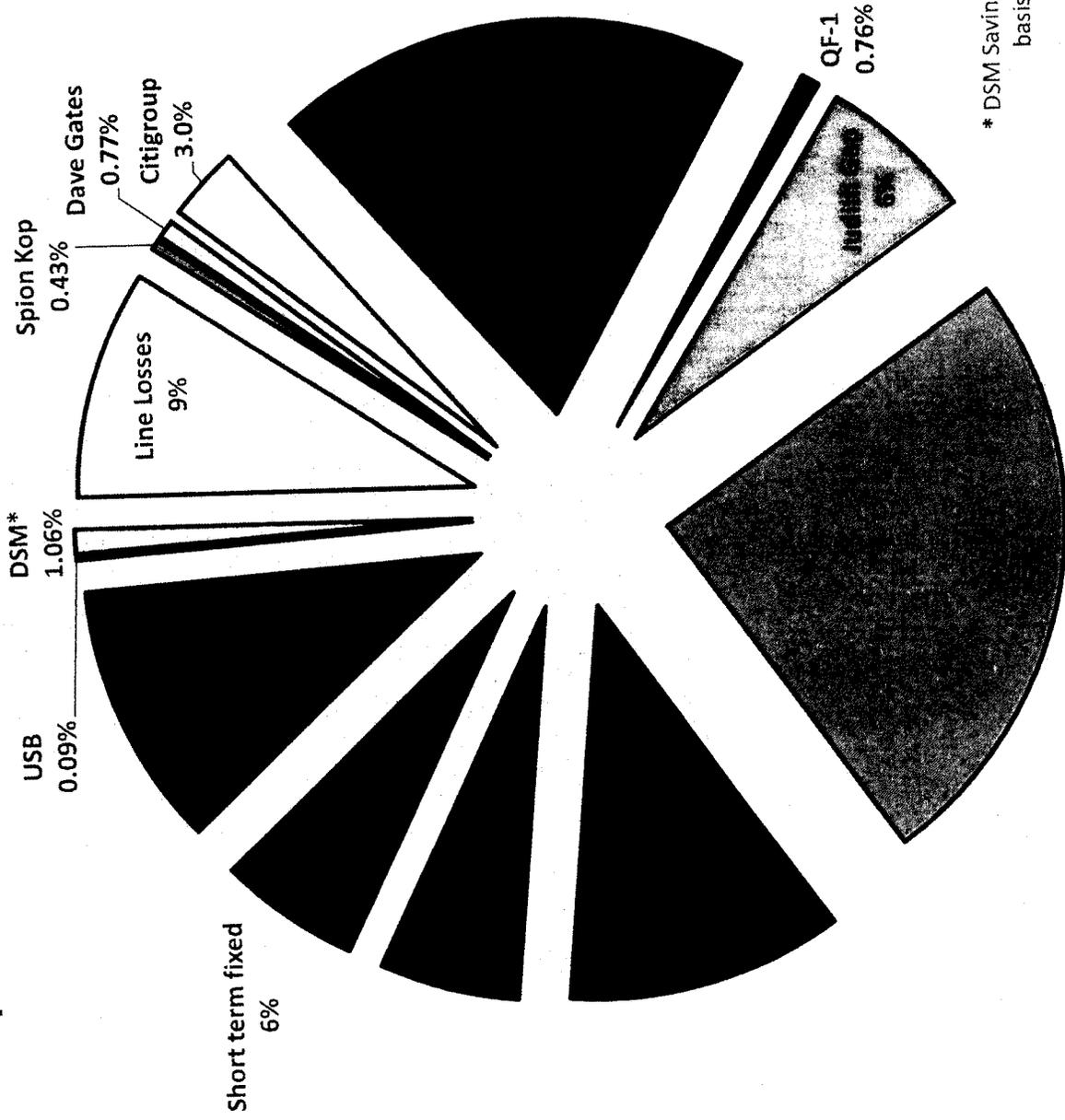
Components of NorthWestern Residential Electric Rates in 2012



NorthWestern Electricity Supply

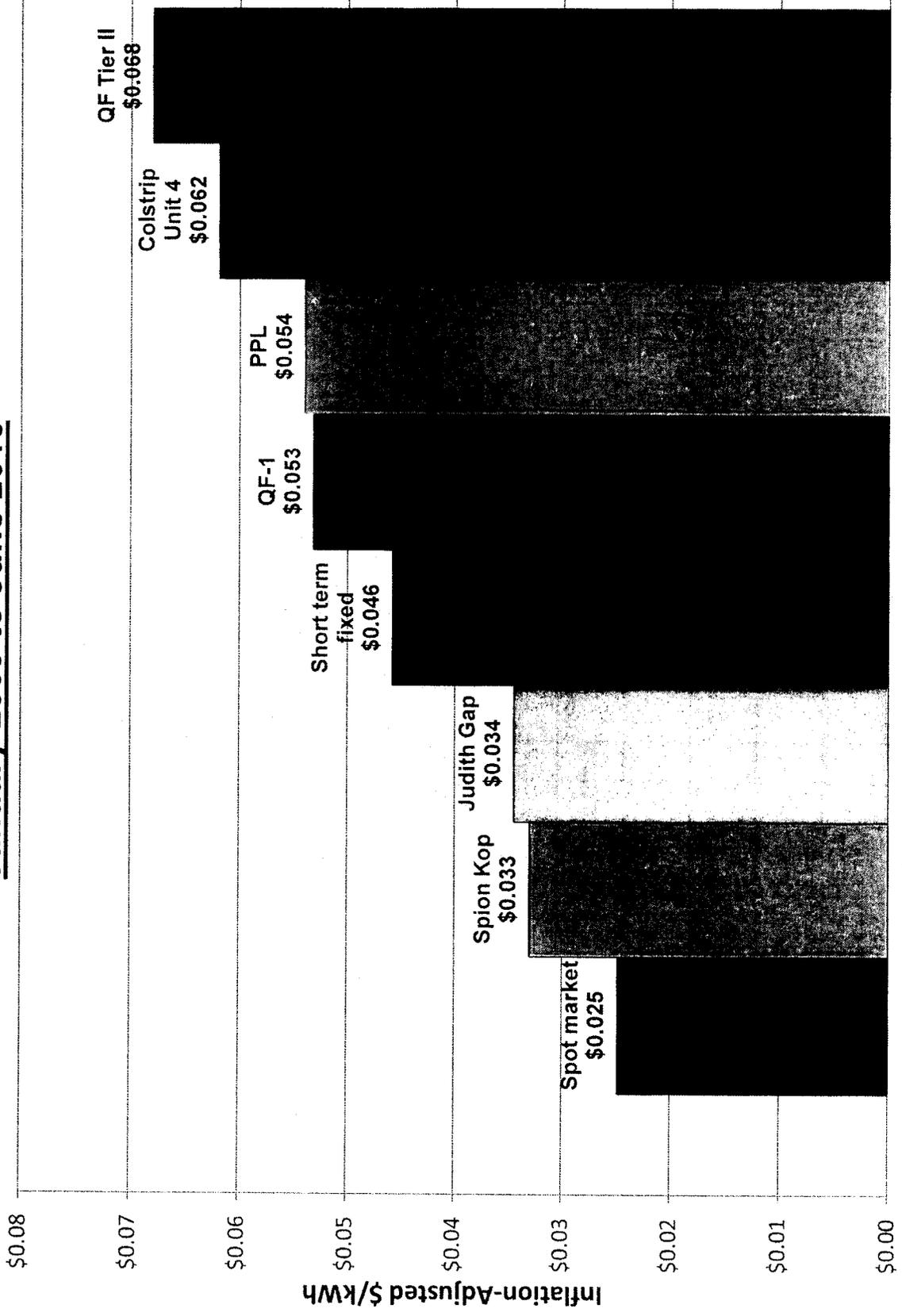


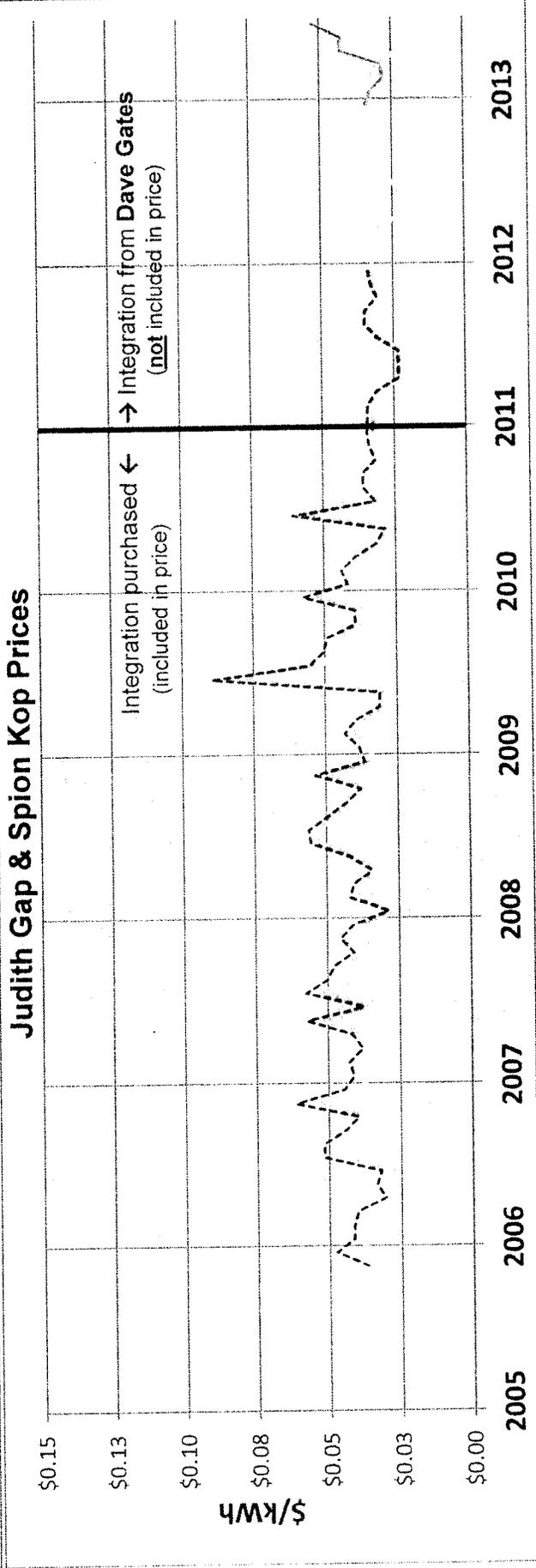
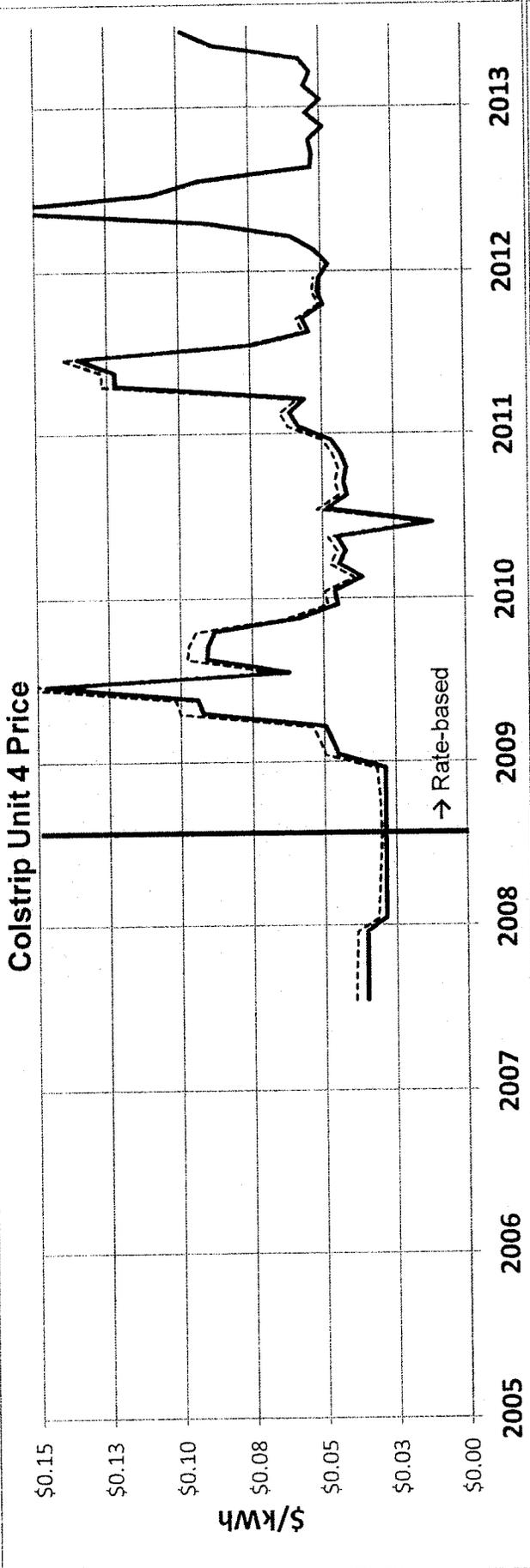
Components of NorthWestern Electricity Supply in 2012



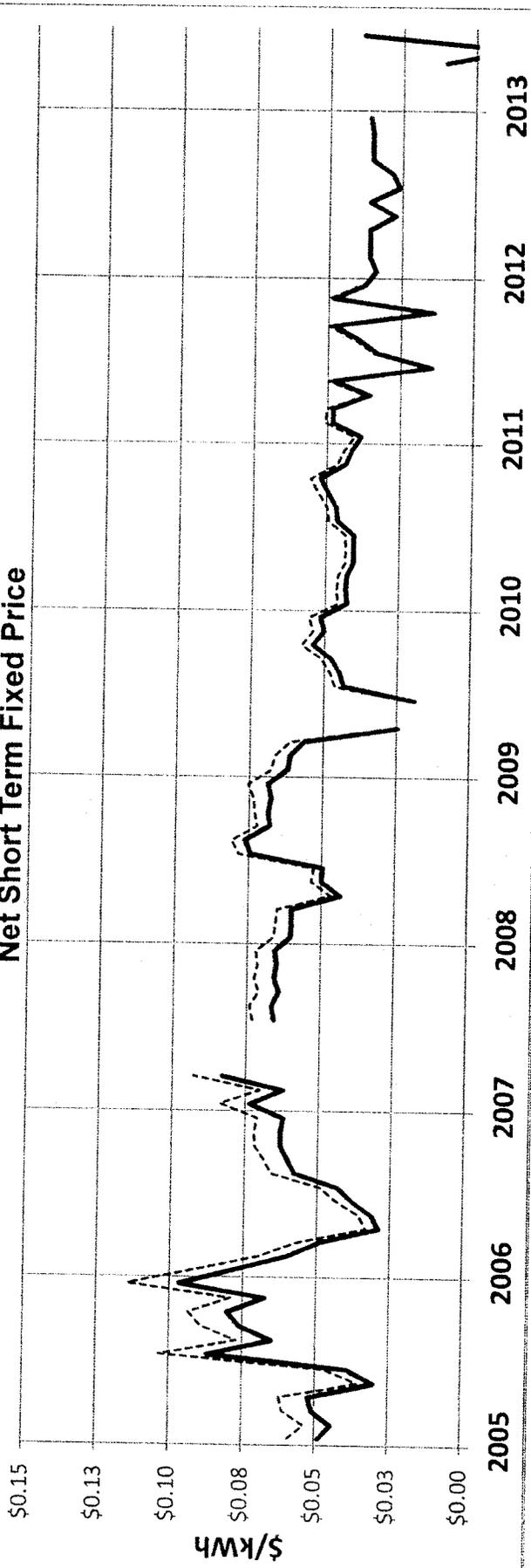
* DSM Savings are reported on a tracker year basis (July 2012 to June 2013)

Selected NorthWestern Electricity Supply Prices January 2009 to June 2013

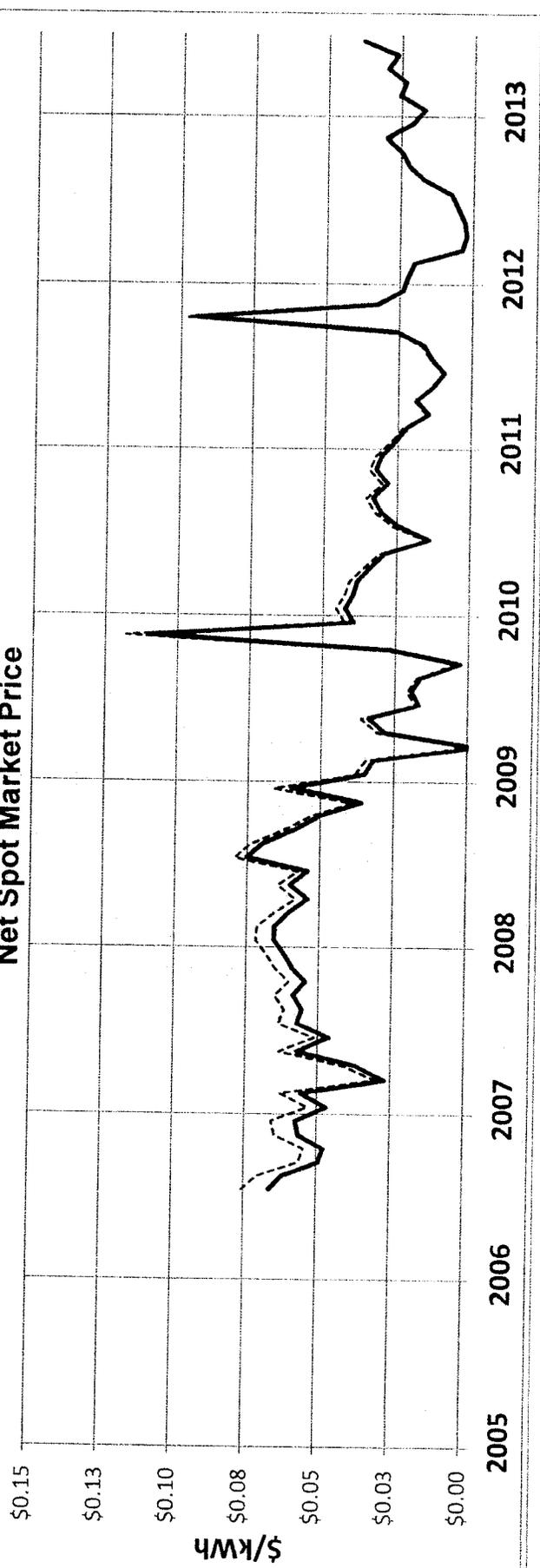


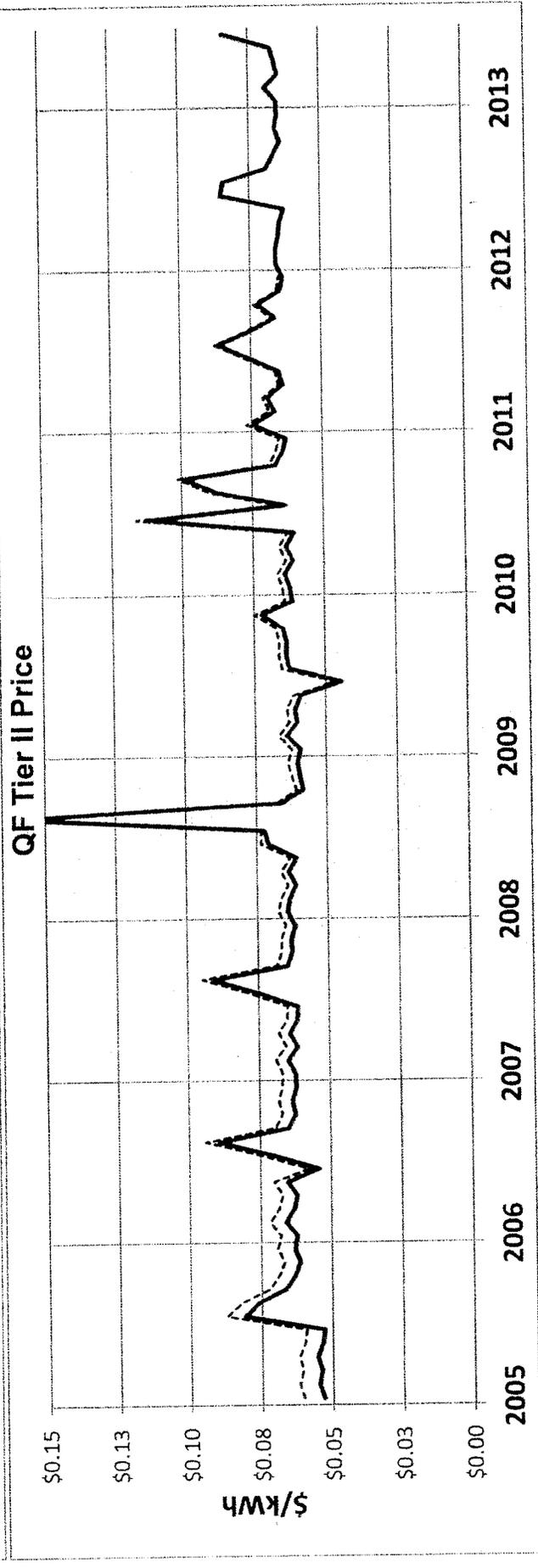
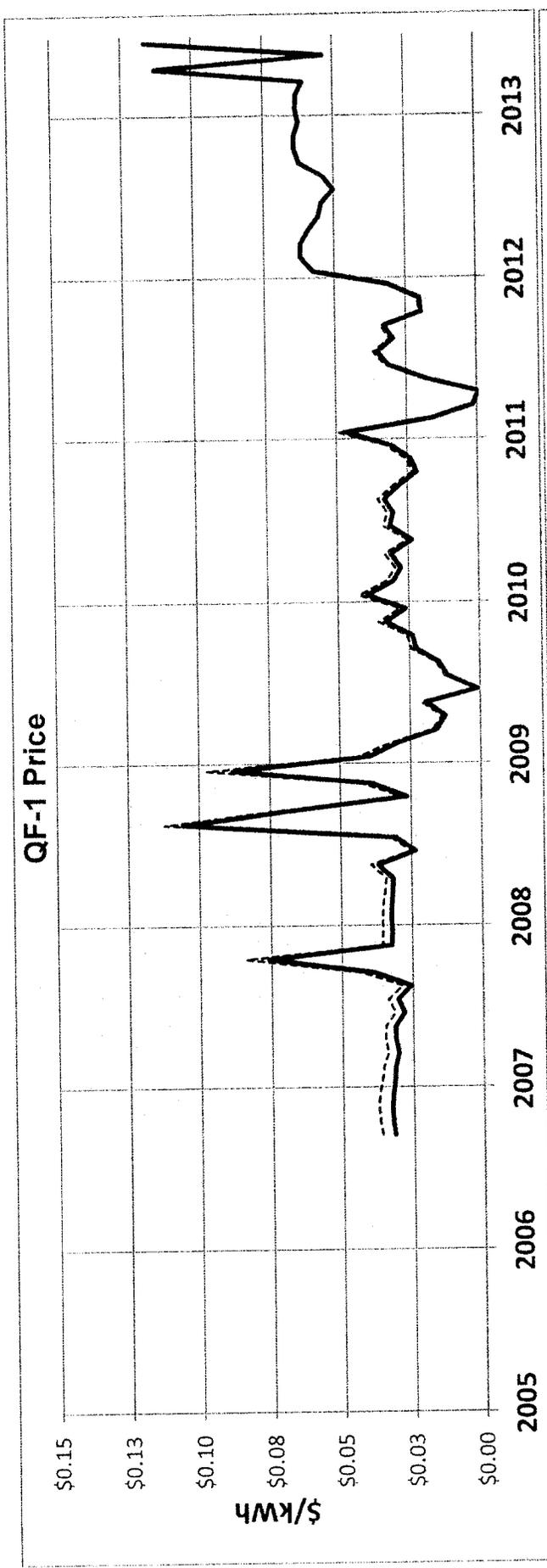


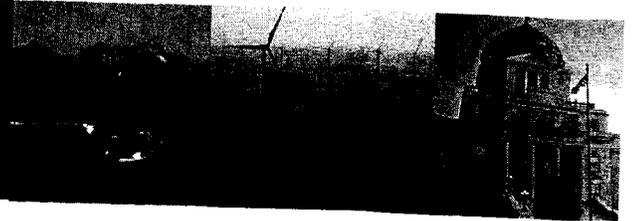
Net Short Term Fixed Price



Net Spot Market Price







Clean & Healthful.
It's your right, our mission.

March 17, 2014

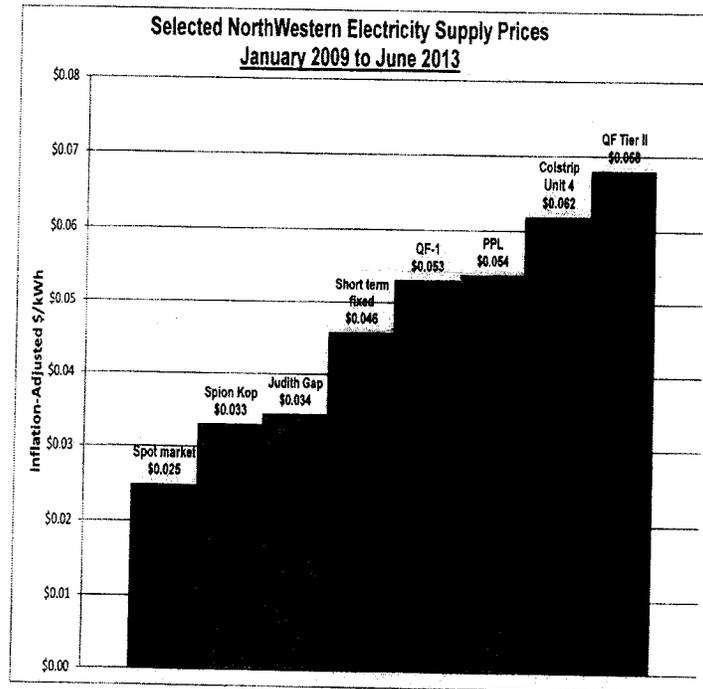
Dear ETIC Members,

The Montana Environmental Information Center (MEIC) appreciates the opportunity to comment on the draft "Consumer Impacts" report under consideration as part of the Renewable Portfolio Standard (RPS) study. The analysis of the RPS's impact on ratepayers is arguably the most important component of the RPS study. Therefore, it is important for ETIC to evaluate consumer impact information beyond the narrow perspective provided in the utility responses to the RPS questionnaire. Several responses by utilities (primarily NorthWestern Energy) are inconsistent with statements and testimony before the Montana Public Service Commission (PSC). In recent PSC dockets, NorthWestern (NWE) paints a much different picture about renewable energy costs, market purchases, fuel price hedging, resource diversity and Dave Gates Generating Station (DGGS) than they do in their responses to the ETIC questionnaire.

Renewable Energy and Market Costs

In response to question #16 in the survey that asks whether the standard has contributed to higher, lower, or neutral costs for their customers, NWE said it was "neutral" but that, "NWE's highest cost RPS resources are currently much more costly on a dollar per megawatt-hour basis than the market purchases that they displace."

Comparing *highest* cost RPS resources to the market is misleading for several reasons. First, NWE focuses only on the *highest* cost RPS resources compared to market purchases, rather than the lowest-cost RPS resources. Also, NWE fails to mention that spot market purchases are cheaper than *any* other resources in their current portfolio. Based on information from the PSC, Colstrip Unit 4, QF contracts, Spion Kop, and Judith Gap are all more expensive than the spot market (purple). See chart for comparison of NWE's supply resource prices.



Using the market as a low-cost comparison to RPS resources is also inconsistent with NorthWestern's statements since 2007 about the cost and risks associated with relying on unpredictable market purchases. In fact, NWE's pending acquisition of PPL's dams hinges on the argument that market purchases and prices are uncertain, and the utility needs to shield ratepayers from market costs and risks by becoming more vertically integrated (owning the dams.) Most recently, NorthWestern's 2013 Resource Supply Plan (Docket#N2013.12.84) the Hydro acquisition docket (Docket# D2013.12.85), and the Spion Kop wind docket (Docket# D2011.5.41) identify the "risk premium" associated with market purchases compared to owning the dams and other renewable resources.

MEIC agrees that the market is unpredictable and supports NWE's decision to shield ratepayers from future uncertainty and risk by purchasing their own renewable resources such as hydro and wind. It is perplexing then that NorthWestern would portray the same market that they don't want to rely on, as a low-cost alternative to RPS resources. The consumer impacts analysis should provide more context related to the cost of renewable resources and volatile market prices than NWE's response to this question affords.

Fuel Price Hedging

Question #15 on the utility survey asks whether the RPS has assisted in hedging against the volatility of fossil fuel markets. NWE responded that it hadn't because RPS resources had caused the company to invest in additional gas-fired resources. Yet, in the Spion Kop docket NWE testified that the project provided a "buffer" against several risks. According to NWE's testimony, "fuel markets have historically demonstrated price volatility and have resulted in significant cost increases. Since wind generating facilities do not consume fuel, they are not subject to fuel price volatility" (D2011.5.41 page JDH10).

Renewable resources developed to meet the RPS such as Spion Kop are one way to effectively hedge against fossil fuel price volatility and related market purchases. As NWE's Spion Kop testimony points out, "renewable resources, including wind, generally lower the overall risk in the supply portfolio and therefore provide long-term benefits to our ratepayers" (D2011.5.41 page JDH9).

Additional gas-fired resources were not mentioned in NWE's testimony about fuel-price risk associated with Spion Kop.

Resource Diversity

Question #14 on the utility survey asks if the RPS has contributed to the diversification of their overall portfolio in Montana. NWE's responded that it hasn't because they had already been focused on renewable resources prior to the RPS. Similarly, question#15 asks whether the standard has led to a reduction in dependence on fossil fuels. NWE responded that any change in fossil fuel use to be "minimal".

NWE has submitted testimony for the PSC that Spion Kop's contribution to resource diversity helps serve the public interest. Moreover, they testified that Spion Kop is necessary to meet the requirements of the RPS. Specifically, that "an owned wind resource provides diversity from more traditional thermal resources and market purchase contracts (D2011.5.41 page TAG-14). As to whether the RPS led to the decision to purchase Spion Kop, NWE testified that "absent Spion Kop, NWE will not meet(emphasis added) the RPS sometime in 2013 or 2014 (D2011.5.41 page JDH 13).

Clearly, Spion Kop and other RPS resources have added diversity to NorthWestern's portfolio. It is inconsequential whether NWE would have developed renewable resources to some degree without the RPS. The percentage of renewable energy in NWE's current portfolio is tied to the requirements of the RPS. Since 2005, NorthWestern has tied the amount of renewable energy they plan to acquire directly to the RPS. For example, in their last four biannual resource procurement plans, NWE has only considered acquiring the amount of renewable energy required to meet the RPS percentages—no more, no less.

Dave Gates Generating Station

Question #21 and #22 on the utility survey ask whether additional resources have been needed to integrate renewable resources because of the RPS. In Question #21 NWE responds that Dave Gates Generating Station (DGGS) was required to integrate renewable resources but in Question #22 NWE responds that integration resources would have been added to their portfolio without the RPS. The consumer impacts report also notes that NWE attributes 50% of the cost of DGGS to the RPS.

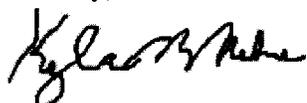
In the DGGS approval docket (D2008.8.95), NorthWestern’s testimony explains their immediate need for their own regulating reserves, outside of integration requirements of RPS resources. According to NWE, several reasons justified their need to build Dave Gates Generating Station (Mill Creek Generating Station at the time). Primary among these was that purchasing regulating reserves from the market and third parties (Idaho Power etc.) was becoming less certain. Prior to construction of Dave Gates, NWE was purchasing 100% of their regulating reserves from the market or third parties. According to NWE’s testimony, DGGS was “a dispatchability and intermittency issue, not a renewable resource issue” (D2008.8.95 page DGG-24).

Attributing 50% of the cost of DGGS is quite high considering that NWE identified 35MW of additional regulation resource needed for both RPS resources *and* qualifying facilities beyond the 85MW they needed at the time DGGS was proposed (D2008.8.95 page 8). Dave Gates is a 150MW facility. Even if all of the 35MW of additional regulation resource was attributed to the RPS, that would only be 23% of the total capacity of the facility.

It is true that DGGS helps balance renewable resources on NWE’s system. But, it is also true that DGGS would have been built regardless of the RPS, because NorthWestern couldn’t rely on a risky market and needed to purchase their own regulation service.

MEIC recommends that ETIC include a broader context for their evaluation and report of consumer impacts. It is important to survey utilities about impacts of the RPS on their customers but it is also important that the utilities are consistent in their statements related to renewable energy resources, alternatives, and cost impacts on customers. Inconsistency abounds in NorthWestern Energy’s responses to the ETIC questionnaire versus their testimony under oath to the Public Service Commission (PSC). ETIC would be remiss not to supplement the consumer impacts report with information from the PSC. Expanding the scope and context of the RPS’s consumer impacts will help provide Montanans with a robust, accurate and complete assessment of the RPS.

Sincerely,



Kyla N. Maki
Clean Energy Program Director